

Description of a new species of *Alastor* (*Alastor*) Lepeletier, 1841 (Hymenoptera: Vespidae: Eumeninae) from Telangana, India, with a key and a checklist of Oriental species

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Abstract

A new species, *Alastor* (*Alastor*) *venkataramani* sp. n. is described from Telangana, India, and compared with its most similar described species, *A. punjabensis* Dutt. A key to and checklist of the species of *Alastor* (*Alastor*) from Oriental region are provided.

Keywords: *Alastor* (*Alastor*), new species, key, checklist, Telangana, India.

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Introduction

Lepeletier (1841) described the genus *Alastor* for two species; the type species *Alastor atropos* Lepeletier, 1841, was designated by Ashmead (1902). This large genus is primarily Ethiopian and Palaearctic, with a few species in the Oriental Region (India and Sri Lanka). This genus is divided into four subgenera namely *Alastor* s. str., *Alastorellus* Giordani Soika, 1991, *Megalastor* Blüthgen, 1951, and *Parastalor* Blüthgen, 1939. Of these the subgenus *Alastor* is recorded from the Oriental Region with four species; one from India, one from Sri Lanka, and the other two species from both India and Sri Lanka (Bingham, 1897; Dutt, 1922; van der Vecht, 1981). In this paper a new species, namely *Alastor* (*Alastor*) *venkataramani* sp. n., is described from Telangana, India, and compared with its most similar described species, *A. punjabensis* Dutt. A key to and checklist of the species of *Alastor* (*Alastor*) from the Oriental region are also provided.

Material and Methods

The specimens were studied and photographed using a Leica stereo microscope with LAS software version 3.6.0. The holotype of the new species described here is deposited in the National Zoological Collections of the Zoological Survey of India, Kolkata(NZC).

Abbreviations used in the text: F = Antennal flagellomeres; H = Head; M = Mesosoma; OOL = Ocellocular distance; POL = Post ocellar distance; S = Metasomal sterna; T = Metasomal terga.

Results

***Alastor* (*Alastor*) *venkataramani* Kumar and Carpenter sp. n.
(Figs. 1-12)**

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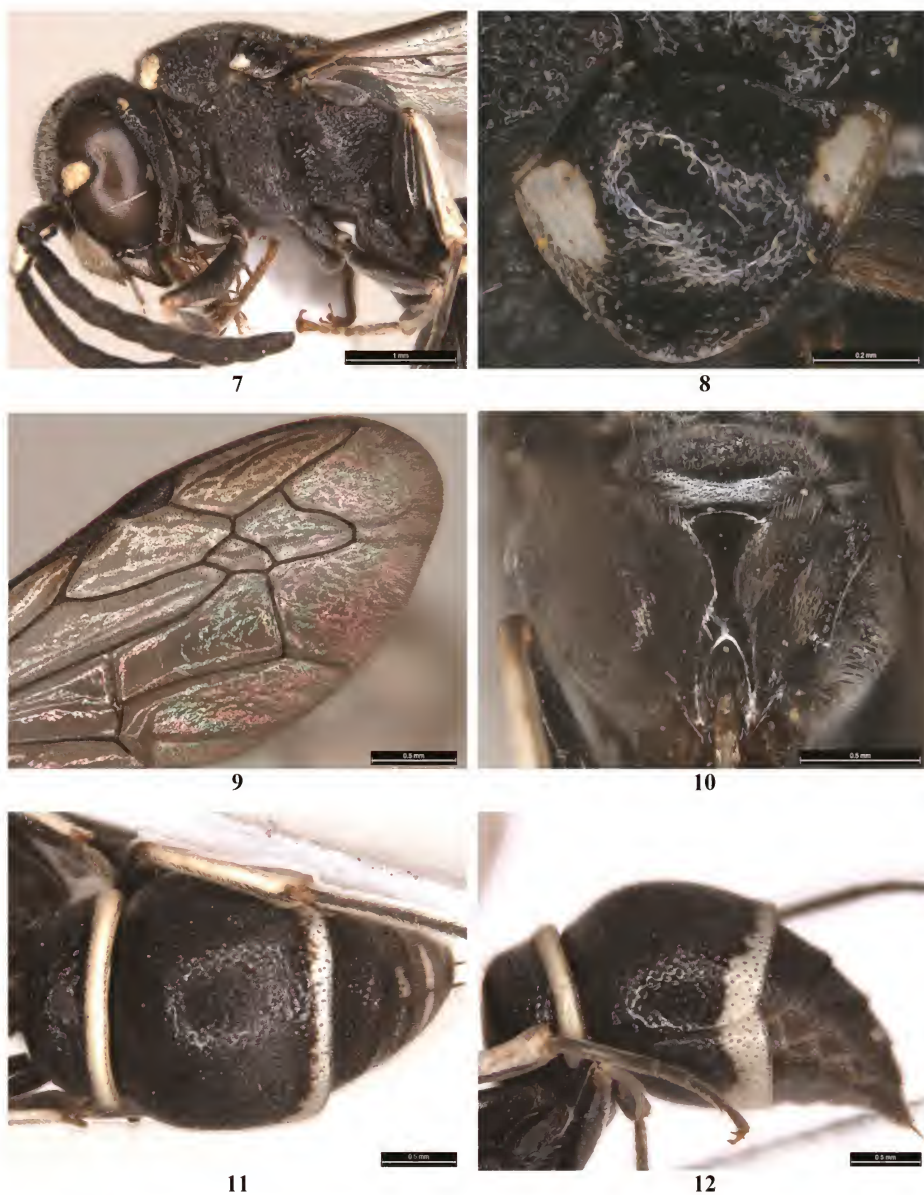
Description: Holotype male (Fig. 1): Body length (H+M+T1+T2) 5.5 mm; Forewing length 4.7 mm. Body black with whitish yellow markings as follows: a large mark on mandible; clypeus; a spot on lower front; ocular sinus; a very small spot on upper part of temple near eye margin; ventral side of scape; a medially interrupted transverse band on pronotum; anterior and posterior apices of tegula; two small spots on scutellum; a small spot on fore and mid femora in apical half; outer surface of all tibiae; a linear mark on outer surface of basitarsus of all legs; a regular band at apex of T1; an irregular band at apex of T2 expanded laterally; a similar but broader band on S2; traces of apical bands on

Plate I



Figs. 1–6. *Alastor (Alastor) venkataramani* sp. nov. Holotype male. (1). Body profile; (2). Head frontal view; (3). Clypeus; (4). Apical antennal articles; (5). Head dorsal view; (6). Head and mesosoma dorsal view.

Plate II



Figs. 7–12. *Alastor* (*Alastor*) *venkataramani* sp. nov. Holotype male. (7). Head and mesosoma lateral view; (8). Tegula; (9). Apical half of forewing; (10). Propodeum; (11). Metasoma dorsal view; (12). Metasoma lateral view.

T4 and T5 medially. All tarsal segments blackish brown except linear yellow marks on basitarsus of all legs. Wings slightly infumated; stigma blackish brown; veins brown. Body with rather sparsely to moderately dense fine silvery white pubescence, with some long hairs (length slightly longer than the diameter of anterior ocellus) on head and mesosoma.

Head: 1.16x as wide as long in front view (Fig. 2); clypeus (Fig. 3) convex, the apex with two acute teeth, the area in between them deeply incised, the distance between teeth 1.17x the distance between anterior tentorial pits, maximum width of clypeus 1.37x its length medially, with coarse punctures medially; frons, vertex and temple closely, strongly and uniformly punctured, diameter of punctures greater than the distance between punctures; POL 1.70x OOL (Fig. 5); diameter of anterior ocellus 0.77x as long as the distance between anterior ocellus and posterior ocelli; temple 0.62x as wide as eye in profile (measured through its ocular sinus) (Fig. 7); minimum interocular distance 1.53x as long as on vertex than at clypeus; occipital carina complete and narrowed ventrally at the margin of temple, almost absent on the margin of vertex. Antenna (Fig. 4) with scape 1.56x as long as F1; F1 1.10x as long as F2, 1.94x as long as wide; F2–F9 each broadened at middle and narrowed at both ends; apical antennal article finger-like, its apex not reaching the base of F9.

Mesosoma (Fig. 6): Anterior face of pronotum smooth with minute scattered punctures; pronotal carina strong except at middle depressed and absent, present on the lateral margin of pronotum; humeral angles of pronotum moderately projecting; posterior face and lateral sides of pronotum, mesoscutum and scutellum strongly and closely punctate, diameter of punctures greater than the distance between punctures; median length of mesoscutum 0.93x its maximum width; scutellum without distinct median longitudinal impression, its posterior apex smooth; metanotum bifaced, horizontal and 1/3 of vertical surfaces strongly punctured as that of scutellum; mesopleuron closely punctured except large area of epicnemium and posterior margin smooth; epicnemial carina not distinct; upper metapleuron with

few strong punctures and strong transverse striae in upper half, lower metapleuron with a few weak punctures at lower half. Propodeum (Fig. 10) vertical, medially concave, smooth except lateral sides with punctures; sides of propodeum rounded in front of the apical tooth, which is distinctly curved upwards. Tegula (Fig. 8) with sparse but strong punctures; parategula absent; axillary fossa oval, not slit-like. Midtibia without spur. Forewing (Fig. 9) with pterostigma 1.89x prestigma, second submarginal cell petiolate, first and second recurrent veins both received in submarginal cell II.

Metasoma (Figs. 11 and 12): T1 without transverse carina but bifaced with smooth basal vertical half and punctured dorsal half, punctures of dorsal area of T1 weak but large, transverse yellow apical band of T1 smooth, maximum width of dorsal surface of T1 2.5x its median length in dorsal view; T1 0.84x as wide as T2; T2 0.91x as long as wide in dorsal view, with a narrow apical lamellae; T2 and S2 with distinct but weak and small punctures.

Female: Unknown.

Material examined: Holotype ♂, INDIA: Telangana, Adilabad district, Tarnam, 9.ix.2013, Coll. D. Prabhakaran and Party, NZC Regd. No. 16556/H3.

Distribution: India: Telangana.

Etymology: The species is named after Dr. K. Venkataraman, Director, Zoological Survey of India for his keen interest and encouragement in our studies.

Discussion

This new species comes close to *Alastor* (*Alastor*) *punjabensis* Dutt, 1922, described from India (Punjab), in having the apex of clypeus deeply incised (cf. the key in van der Vecht, 1981). But it distinctly differs from *A. punjabensis* in having: (1) Median area of clypeus densely punctured (in the latter clypeus sparsely punctured); (2) Scutellum densely punctured without distinct median longitudinal impression on apical half (in the latter scutellum sparsely punctured with median longitudinal impression on apical half); (3) Tegula punctured (in the latter tegula smooth and shining).

**Key to Oriental species of *Alastor* (*Alastor*)
Lepeletier, 1841**

(Modified from van der Vecht, 1981)

1. Apex of clypeus deeply incised.2
- Apex of clypeus truncate or shallowly emarginate.3
2. Clypeus slightly punctured; scutellum sparsely punctured with median longitudinal impression on apical half; tegula smooth and shining.....**A. punjabensis Dutt**
- Median area of clypeus densely punctured (Fig. 3); scutellum densely punctured without distinct median longitudinal impression on apical half (Fig. 6); tegula punctured (Fig. 8).....**A. venkataramani sp. n.**
3. Sides of propodeum angularly projecting in front of the apical tooth, which is short and not distinctly curved upwards (van der Vecht, 1981: fig. 40); humeral angles of pronotum strongly projecting (van der Vecht, 1981: fig. 39); ocular sinus black.**A. abditus van der Vecht**
- Sides of propodeum rounded in front of the apical tooth, which is distinctly curved upwards (van der Vecht, 1981: fig. 49); humeral angles of pronotum not or hardly projecting (van der Vecht, 1981: figs. 32, 48); ocular sinus with yellow spot.4
4. Antenna rather slender, in dorsal view 3rd article longer than 4th (van der Vecht, 1981: fig. 30); apex of clypeus shallowly emarginate (van der Vecht, 1981: fig. 29); dorsal surface of T2 on each side with oblique shallow impression, outline in profile beyond the basal constriction almost straight (van der Vecht, 1981: fig. 35); mandible with yellow spot; anterior margin of pronotum with interrupted band; T1 and T2 with narrow apical yellow band, T3 without yellow mark. (♀ unknown).**A. variolosus Bingham**
- Antenna thicker, in dorsal view 3rd and 4th articles about equally long; apex of clypeus shallowly emarginate; dorsal surface of T2 with transverse impression, which clearly visible in profile (van der Vecht, 1981: fig. 50); mandible without yellow spot; anterior margin of pronotum with transverse spot near humeral angle; T1 and T2 with broad apical yellow band, T3 with abbreviated band.....**A. sulcatus van der Vecht**

**Checklist of the species of *Alastor* (*Alastor*)
Lepeletier, 1841, from the Oriental Region**

1. *Alastor* (*Alastor*) *abditus* van der Vecht, 1981 — India (Tamil Nadu; Kerala) (Gusenleitner, 2006); Sri Lanka (near the town of Anuradhapura; Suriyawewa of Hambantota district; Hunuwilagama of Anuradhapura district; China Bay of Trincomalee district).
2. *Alastor* (*Alastor*) *punjabensis* Dutt, 1922 — India (Punjab).
3. *Alastor* (*Alastor*) *sulcatus* van der Vecht, 1981 — India (Pondicherry); Sri Lanka (Tissamaharama of Hambantota district; Padaviya archeological site of Anuradhapura district; China Bay of Trincomalee district).
4. *Alastor* (*Alastor*) *variolosus* Bingham, 1897 — Sri Lanka (Trincomalee).
5. *Alastor* (*Alastor*) *venkataramani* sp. n. — India (Telangana).

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